ABSTRACT

An ACS circuit includes: a basic DPM retaining section (11) for retaining basic DPMs (differential path metrics); a basic DPM calculating section (12) for calculating the basic DPMs; a reference DPM calculating section (13) for calculating reference DPMs, which are DPMs other than the basic DPMs; a basic DBM calculating section (14) for calculating basic DBMs (differential branch metrics), which are DBMs necessary for calculating the basic DPMs; and a path selecting section (15) for selecting the most likely paths for Viterbi decoding in accordance with the basic DPMs, the reference DPMs and the basic DBMs. The basic DPM calculating section (12) calculates new basic DPMs in accordance with the basic DPMs, the reference DPMs, the basic DBMs, and the results of the most likely path selection by the path selecting section (15).